

MISCELLANEOUS PAPERS

Centre for Entomological Studies Ankara

No 222

25 February 2024

ISSN/eISSN 1015-8235

<https://zoobank.org/References/6EB5E0ED-D7CA-431A-9DEF-398B9101842C>

A Cnephasiini species *Cnephasia ecullyana* Réal, 1951 new for fauna of Türkiye (Lepidoptera, Tortricidae)

Ahmet Ömer Koçak¹ Muhabbet Kemal²

Abstract: A Cnephasiini species *Cnephasia ecullyana* Réal, 1951 new for fauna of Türkiye (Lepidoptera). *Misc. Pap.* 222: 1-3, 4 figs.

This study includes information about the record of *Cnephasia ecullyana* in Türkiye, the new provincial detection of *C. communana*, and the external morphology and female genital structures of the female individuals of both species.

Key words: Lepidoptera, Tortricidae, *Cnephasiini*, *Cnephasia*, new record, Anamur, İçel, Türkiye.

Introduction

Some important studies were published during our Lepidoptera research, which we started with Prof. Dr. Koçak in the Central Taurus Mountains centered in Anamur (Kemal & Koçak, 2017, 2018; Kemal, Kızıldağ & Koçak, 2020). In the studies, *Altenia modesta* (Danilevsky, 1955) was added to the Türkiye fauna (Kemal & Koçak, 2017), while *Altenia anamuria* Kemal & Koçak, 2018 (Gelechiidae) and *Kalliesia ruya* Kemal & Koçak, 2018 (Psychidae) were described as new species. Finally, Kemal et al. (2020) described a new species from Anamur, *Cnephasia anamuria* Kemal, Kızıldağ & Koçak, 2020, while the 326th-328th taxa in the list (Kemal, Kızıldağ & Koçak, 2020: 59) remained at the genus level. In this (present) article, the identification process of the taxa (*Cnephasia* sp.1 and sp.2) included in the study in question has been completed. The first taxon (sp.1) was identified as *Cnephasia ecullyana* Réal, 1951 and was added to the Türkiye fauna as a new record. While the second taxon (sp.2) is a well-known species in Europe, *C. communana* (Herrich-Schäffer, [1851]), which is little known in our country, was recorded only from Kırıkkale (Seven, 2000) and Bolu (Özdemir & Çalışkan, 2014).

Studies on *Cnephasia* species in Türkiye continue. We foresee that the number of species will increase in the future.

Material and methods

Research materials were collected from Anamur (İçel) with an automatic light trap at night in May and June of 2018 and 2019. Only one female individual from each species was collected and examined. Samples were prepared, genital preparations were made, and photographs were taken in

¹ It is a continuation of the work we carried out with Prof. Dr. Koçak. Similar studies will continue.

² Corresponding author: Dr Muhabbet Kemal- Van Yüzüncü Yıl University, Faculty of Science, Dept. of Biology, Campus, Van / Türkiye. e-mails: muhabbet_kemal@yahoo.com.tr & cesa_tr@yahoo.com.tr

the laboratory as required. Geographic codes regarding the distribution of species are based on the study of Koçak and Kemal (2019).

Cnephasia communana (Herrich-Schäffer, [1851]) (Figs. 1a-b)

Synonym(s): *communana* Herrich-Schäffer, [1851].

Range (as codes): MA LY ES FR IT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR DK NO SE FI EE LV LT RU Sb MD UA BY LB Bsa Cc GG TM KG TR (Koçak & Kemal, 2018), IR Mz (Alipanah, 2019).

Distribution in Türkiye: Kırıkkale (Seven, 2000), Asia Minor [Anadolu, Türkiye] (Razowski, 2002), Bolu (Özdemir & S. Çalışkan, 2014) and for İçel Province with the present paper.

Material studied: 1♀ (GP3261). S. Türkiye, İçel Prov., Anamur, Çiçekyurdu, 1620m (33Ae), 3.vi.2019, M.Kemal & A.Koçak leg. (Cesa-coll.).

Remarks: In the female genitalia, the genital structure fits the description of Razowski (1958, 2002) in terms of general characteristics. On the other hand, the funnel-shaped upper part of the colliculum has distinct triangle and a strongly chitinized. The bursa copulatrix is more rounded (close to Razowsk, 1958 and Alipanah, 2019), oval in Razowski (2002). The signum expands further towards the center of the bursa copulatrix, as in Razowski (1958) and Alipanah (2019).

Cnephasia ecullyana Réal, 1951 (Figs. 2a-b)

Synonym(s): *Cnephasia tyrrhaenica* Amsel, 1952; *Cnephasia pollinoana* Trematerra, 1991.

Range (as codes): ES (Moreno, 2014: 228), PT FR Sa Si IT DE CH AT CZ SK HU YU GR (Koçak & Kemal, 2015).

Distribution in Türkiye: New record for Türkiye from İçel Province.

Material studied: 1♀ (GP3262): S. Türkiye, İçel Prov., Anamur, Ovabaşı 2km W. 100m (33Am), 3. v. 2018, M.Kemal & A.Koçak leg., (Cesa-coll.).

Remarks: In the female genitalia, sterigma is relatively wider and its ends are not very pointed (it is pointed at the tip in Razowski, 1992, 2002), the lower lobe is rounded proximally, and the bursa copulatrix is oval (as in Steuer, 1984), as opposed to in Razowski (2002), which is round-like and relatively smaller. However, in the Razowski (1992) drawing, it is seen that the bursa copulatrix is slightly larger than the general size. Signum, from bursa copulatrix to ductus bursae, is interrupted and diluted, and extends towards the free end, slightly exceeding half of the bursa copulatrix. In the drawings in Réal (1951) and Razowski (2002), the signum approaches the free end of the bursa copulatrix without dilution or interruption.

Results and Discussion

It is observed that the characters in the female genital structure in both taxa have some differences when compared with the literature data (as stated above). This situation has been considered as a geographical variation for now. Detailed information can be revealed through future studies on more individuals. Nässig and Thomas (1991) emphasize in their study that *ecullyana* should be considered a common and native species in the warm regions of Central Europe, an opinion which Razowski (1992) also supports. In a previous study, the authors had stated that one of the four specimens in the Staudinger collection came from Amasya (Türkiye), but it is not stated which species it belongs to. Razowski (1958) described *Cnephasia heringi* based on samples from Amasya and Mardin in his study on Tortricidae species in the collection of the Humboldt University Museum of Zoology. Staudinger's Amasya samples are probably among this collection. Moreover, apart from *C. heringi* Razowski, 1958, *abrasana* (Duponchel, [1843]) and *pasiuana* (Hübner, [1799]) species are also known to exist in Amasya (Koçak & Kemal, 2018).

According to Koçak and Kemal (2018), *Cnephasia* Curtis, 1826, is represented by 28 species in Türkiye. With the new record *ecullyana* and *anamuria*, the number of *Cnephasia* species in Türkiye has now increased to 30 species.

References

Alipanah, H., 2019. An overview of the tribe Cnephasiini (Lepidoptera: Tortricidae: Tortricinae)

of Iran with description of a new species. *Zootaxa* 4661 (3): 501–521.

- Kemal, M. & A.Ö. Koçak**, 2017. Some vernal Lepidoptera of SE Turkey, faunistical results of a short trip made in 2017 with some taxonomic and bionomic notes. *Cesa News* 133: 1-16, 26 figs.
- Kemal, M. & A.Ö. Koçak**, 2018. Annotated list of the moth fauna of Anamur district (İçel Prov., South Turkey), with descriptions of new species (Lepidoptera). *Misc. Pap.* 167: 1-45, 73 figs., 1 map.
- Kemal, M., S. Kızıldağ & Koçak, A.Ö.**, 2020. Annotated list of the Heterocera (Lepidoptera) of Anamur district (İçel Province, South Turkey) with description of a new species. *Priamus* 19 (1): 1–72, 87 figs.
- Koçak, A.Ö. & M. Kemal**, 2015. Annotated list of the lepidopterological taxa in the info-system of the Cesa - Part I. *Cent. ent. Stud., Memoirs* 7: 1-4792, 1 Tab.
- Koçak, A.Ö. & M. Kemal**, 2019. First updated geographical codes used in the publications of the Cesa. *Priamus* 17 (4): 319-360.
- Moreno, A.V.**, 2014. Catálogo sistemático y sinonímico de los Lepidoptera de la Península Ibérica, de Ceuta, de Melilla y de las Islas Azores, Baleares, Canarias, Madeira y Salvajes (Insecta: Lepidoptera). Suplemento a *SHILAP Revta. lepid.*, Madrid, 1184 páginas.
- Nässig, W.A. & W. Thomas**, 1991. *Cnephasia ecullyana* Real, 1951, a species native to Central Europe (Lepidoptera, Tortricidae). *Notalepid.* 14 (1): 41-51.
- Razowski, J.**, 1958. New and little known Palaearctic species of the genus *Cnephasiini* (Lepidoptera, Tortricidae). *Acta zool. cracov.* Vol. 2(25): 563-684, 10 pls.
- Razowski, J.**, 1992. Notes on *Cnephasia ecullyana* Real, 1951 and *C. oxyacanthana* (H.- S., 1851) (Lepidoptera: Tortricidae). *Nota lepid.* 15 (1): 65-69.
- Razowski, J.**, 2002. *Tortricidae of Europe. Vol (1). Tortricinae and Chlidanotinae.* 247 pp., 71+xvi Pls., Bratislava.
- Real, R.**, 1951. Trois espèces nouvelles de *Cnephasia* (Lép. Tortricidae) du sud-est de la France. *Bull. Mens. Soc. Linn. Lyon* 20 (10): 223-231.
- Özdemir, M. & S. Çalışkan**, 2014. Contribution to knowledge of the leafroller fauna (Lepidoptera: Tortricidae) of Turkey. *Zoology in the Middle East*, Vol. 60 (3): 236–245.
- Seven, S.**, 2000. Studies on the taxonomy, ecology and the fauna of the Province Kırıkkale (Lepidoptera). *Priamus* 10 (1/2): 1-101.
- Steuer, H.**, 1984. Die Schmetterlinge von Bad Blankenburg, IV. Teil (Lepidoptera). *Dt. ent. Z.* (N. F.) 31: 91-152, 2pl., figs.



Figs: *Cnephasia* spp. upperside of wings and female genitalia. 1a-b: *Cnephasia communana*; 2a-b: *C. ecullyana*, M.Kemal (Cesa).

MISCELLANEOUS PAPERS

Centre for Entomological Studies Ankara

Special issue 05 January 2024 ISSN/eISSN 1015-8235

Corrigendum

Ehrmann, R. & S. Ehrmann, 2024. My personal memories of Roger Roy. *Misc.Pap.*,
Special issue: 1-7.

Erratum	Corrected
Roger Roy was born on July 14, 1929 and passed away on March 31, 2023 at the age of 93.	Roger Roy was born on July 14, 1929 and passed away on April 2, 2023 and he was 94.
©Reinhard Ehrmann	©Reinhard Ehrmann and Cornelia Erhmann

Miscellaneous Papers is a peer reviewed serial of the Centre for Entomological Studies Ankara, established in 1989. It appears at irregular interval in a year, as PDF format and includes original articles of the research workers of the Centre, regarding on various subjects on Entomology (taxonomy, nomenclature, checklist, fauna, biodiversity, distribution, biogeography, ecology, insect-plant interactions, bionomy, and behaviour).

The CESA is a non-profit group, no royalties will be paid to authors of contributions. Papers accepted become the copyright of the related serial.

Miscellaneous Papers is currently archived online at "Internet Archive", in accordance with the publication rules of the ICZN. It is an open-access serial, distributed under the terms of the "Creative Commons Attribution License", which permits free use, and distribution in any medium, provided the original author(s) and source are credited.



Centre for Entomological Studies Ankara

(A scientific Consortium)

(co-operation of research workers for pure-scientific, not commercial purpose)

Web Page of the Cesa: <http://www.cesa-tr.org/>

Scientific Serials: Priamus & Priamus Supplement (print and online versions) (ISSN 1015-8243)³, Miscellaneous Papers (print and online versions) (ISSN 1015-8235)⁴, Memoirs (print and online versions) (ISSN-8227)⁵, DVD Films⁶, Iconographia Insectorum⁷ (online), Cesa Publications on African Lepidoptera (online)⁸, Cesa News (online)⁹, Cesa Books (online)¹⁰

Owners / Sahipleri - Editors / Yayıncılar: Prof. em Dr. Ahmet Ömer Koçak (c/o Van Yüzüncü Yıl University, Van, Turkey), Asst. Prof. Dr. Muhabbet Kemal Koçak (c/o Van Yüzüncü Yıl University, Van, Turkey).

Editorial Board of all Scientific Serials of the CESA / Bütün Bilimsel Yayınların Yayın Kurulu: Insecta, taxonomy, nomenclature, ecology, faunistics: Prof. em Dr. Ahmet Ömer Koçak (c/o Van Yüzüncü Yıl Üniversitesi, Turkey), Asst. Prof. Dr. Muhabbet Kemal Koçak (Van Yüzüncü Yıl University, Turkey).

Chief referees of all Scientific Serials of the CESA: Prof. em Dr. Ahmet Ömer Koçak & Asst. Prof. Dr. Muhabbet Kemal Koçak: Insecta, taxonomy, nomenclature, fauna, ecology, catalogues, checklists of the Old World.

Expert referees according to the subject areas: Dr. Peter Huemer (Austria) and Dr. Ole Karsholt (Denmark): Gelechioidea, and some other Microlepidoptera groups in Palaearctic (Lepidoptera). Mag. Peter Buchner (Austria): Depressariidae (Lepidoptera). Dr. J. B. Heppner (U.S.A.): Microlepidoptera of Nearctic and Neotropical. Dr G. Baldizzone (Italy): Coleophoridae (Lepidoptera). Prof. Dr. Selma Seven Çalışkan (Gazi University): Microlepidoptera (except Pyraloidea). Assoc.Prof. Dr. Mustafa Özdemir (Poplar and Fast Growing Forest Trees Research Institute): Geometridae & Tortricidae. Assoc. Prof. Dr. Kesran Akın (Bitlis Eren University): Pyraloidea. Assoc. Prof. Dr. Erdem Seven (Batman University): Noctuoidea. Dr. V. Korneyev (Ukraine): Tephritidae, Pyrgotidae, Ulidiidae (Diptera). Prof. Dr. Y.G.Verves (Ukraine): Sarcophagidae (Diptera). Dr. Daniel Burckhardt (Switzerland): Psyllidae (Homoptera). Prof. Dr E. Heiss (Austria): Hemiptera. Dr R. Ehrmann (Germany): Mantodea. Prof. Dr. Mustafa Ünal (Bolu, Turkey): Orthoptera. Prof. Dr. Hüseyin Özdikmen (Turkey): Coleoptera. Prof. Dr. Suat Kiyak (Turkey): Hemiptera. Molecular studies: Asst. Prof. Dr Sibel Kızıldağ (Van Yüzüncü Yıl University, Van, Turkey).

Plant taxonomy, flora and vegetation: Assoc. Prof. Dr. Süleyman Mesut Pınar, Assoc. Prof. Dr. Hüseyin Eroğlu (Yüzüncü Yıl University, Van, Turkey).

English Language Editor: Mr. Aykut Yunusoğlu (İstanbul, Turkey).

Editorial policy: the submitted manuscript is evaluated by the Chief Editor and Referee. In case of need, the manuscript is sent to expert referees according to the subject areas.

ALL RIGHTS RESERVED

Correspondences should be addressed to: Prof. em Dr Ahmet Ömer Koçak, c/o Yüzüncü Yıl University, Fen Fakültesi, Biyoloji Bölümü, Kampus, Van / Turkey. - e-mail: cesa_tr@yahoo.com.tr

All the serials of the Cesa are archived regularly by the Internet Archive (300 Funston Ave., San Francisco, CA 94118, U.S.A.), in accordance with the rules of the International Codes of Zoological Nomenclature (ICZN)

<https://archive.org/>

also recorded regularly by the Zoological Record, Thomson Reuters, Enterprise House, Innovation Way, Heslington, York, YO10 5NQ, United Kingdom, <https://clarivate.com/>

³ <http://www.cesa-tr.org/Pri.htm>

⁴ <http://www.cesa-tr.org/Miscell.htm>

⁵ <http://www.cesa-tr.org/Memoirs.htm>

⁶ <http://www.cesa-tr.org/CDF.htm>

⁷ <http://www.cesa-tr.org/Icon.htm>

⁸ <http://www.cesa-tr.org/CPAL.htm>

⁹ <http://www.cesa-tr.org/Cesanews.htm>

¹⁰ <http://www.cesa-tr.org/Cesabooks.htm>